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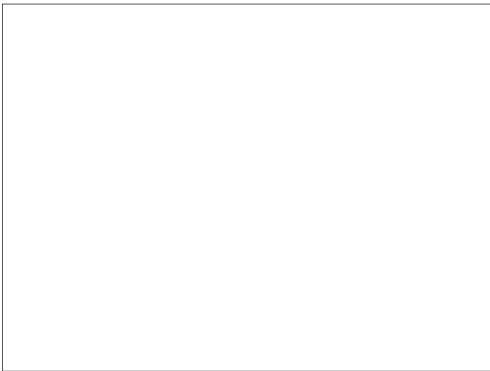
CONFIDENTIAL

13 September 1955

MEMORANDUM FOR THE RECORD

SUBJECT: Table Showing Status of Hole-Drilling Projects as of 7 September 1955

1. The Third Monthly Meeting of the Hole-Drilling Committee was held on 7 September 1955. Those present were:



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2. The table below shows the status of the project at the present time.

AFB Division



25X1

Subject:




Status:

Remarks:

25X1

Masonry Drilling. Proposal was all-inclusive and not specific.

 will submit another proposal.

 discussed proposal with  of  in greater detail as to the need of the project.

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National Bureau of Standards

Wall-thickness Measurement Group. Possibility of Ultrasonic measurement and type of equipment which might be used.

Proposal accepted and work now in progress. Final results expected in 3-4 months.

Chemical Division



Chemical decomposition of concrete and mortar

Awaiting security approval. This company has contract research work on cement and concrete chemistry.

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SubjectStatusRemarks

Chemical decomposition of concrete and mortar.

Awaiting security approval.

These companies to contract research work on cement and concrete chemistry.

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Wall-thickness measurement

Feasibility study and calculations now underway.

Use back-scattering of neutrons.

Engineering Division

25X1

Proposal covers:

Proposal will be dropped.

There are several other methods of obtaining alternating current as well as manual methods of obtaining power. (See [] Proposal.)

- Survey of batteries to be used to run motors.
- Survey of d.c. motors to determine feasibility of battery-operated, quiet, drills.
- Preliminary masonry drilling tests with available equipment.
- Report of results and conclusions - \$6360 - 4 mos.

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Proposal covers a general study of the present state of the art and consideration of new methods of wall penetration. Suggests work on:

- Supersonic drilling.
- Jet of abrasive particle in liquid or air.
- Rubber bit impregnated with diamonds - \$9734 - 6 mos.

Proposal will be re-submitted. Emphasis will be upon mechanism of cutting, such as angle of cutting bit; also high velocity jets.

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Engineering Division (Contd)

(Contd)

25X1

Subject	Status	Remarks
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Proposal covers a first phase for:	Will accept as is. Proposal being processed.	
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- Survey of commercial equipment.
- Tests of borrowed commercial equipment to determine what could be used and what should be developed for our purposes.
- Reports of results and recommendations - \$4500 - 4 m.s.

The proposal covers the construction of a testing facility to consist of a building (10' x 20') with heat and power. Test walls would be constructed inside in order to simulate drilling in a room. Sound level measuring equipment and 20 weeks of testing are included - \$17,000 - 1 year.

Meeting has been arranged whereby AD will brief in detail as to requirements.

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Pipe Pusher Program

It has been decided to accept this proposal as it stands. It has the informal approval of ASD. Present program is being expanded.

The new program will include testing of drilled determination of the horsepower and load requirements for penetrating various materials. [redacted] has already demonstrated that by using a hollow 5/16" hollow air-cooled drill they can penetrate 30' of concrete in 2 minutes. Rogers Denny can furnish details on this test.

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Silent alternating current drives and manual drives.

Holding proposal for additional personnel clearance before submitting it to us.

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Engineering Division (Contd)

[Redacted]

25X1

<u>Subject</u>	<u>Status</u>	<u>Remarks</u>
General Proposal	Proposal has been mailed to us.	

[Redacted]

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Explosive projectile such as used by carpenters to nail lumber to concrete.	Still awaiting proposal.
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[Redacted]

25X1

General proposal.	Nothing new to report.
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T&I Division

Softening of concrete.	Feasibility tests and studies.	T&I will test theory that concrete can be softened by subjecting it to sudden extremes of temperature.
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[Redacted]

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T&I/Chemical Division

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